

SELECTIVE CARBON MONOXIDE OXIDATION CATALYST, METHOD OF
MAKING THE SAME AND SYSTEMS USING THE SAME

ABSTRACT OF THE DISCLOSURE

A CO-selective catalyst comprises a catalytic material, wherein the catalytic material is selected from the group consisting of Pt, Pd, Rh, Ir, Os, Ru, Ta, Zr, Y, Ce, Ni, Cu, and oxides, alloys, compounds, and combinations comprising at least one of the foregoing; a modifying agent selected from the group consisting of Pb, Bi, Ge, Si, Sb, As, P, and combinations comprising at least one of the foregoing; and a support.

In one embodiment, the method for forming the CO selective catalyst comprises combining a catalytic material and a support with about 2 to about 25 atomic percent of a modifying agent, based on the total surface atoms of the catalytic material, to form a modified catalyst-containing support and disposing the modified catalyst-containing support on or into a substrate.